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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/923,751	08/07/2001	John D. Hottovy	2039.017000/KDG	3355
37774	7590	04-07/2005	EXAMINER	
WILLIAMS, MORGAN & AMERSON, P.C. 10333 RICHMOND, SUITE 1100 HOUSTON, TX 77042			CHEUNG, WILLIAM K	
			ART UNIT	PAPER NUMBER
			1713	

DATE MAILED: 04/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/923,751

Applicant(s)

HOTTOVY ET AL.

Examiner

William K Cheung

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 2/25/2005.  
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.  
4a) Of the above claim(s) 14 is/are withdrawn from consideration.  
5) ☒ Claim(s) 15-17 is/are allowed.  
6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.  
7) ☒ Claim(s) 1-13 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 07 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 030303.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Applicant's affirmed election of Group I invention, claims 1-13, 14-17, without traverse is acknowledged. Therefore, in view of lack of traversal to restriction requirement set forth from Response to Restriction Requirement, the restriction set forth by the examiner is deemed proper and is therefore made Final.

### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. In Figure 1, the drawing does not contain the proper labeling of the parts and fail to show the location of the recited "streams" of the instantly claimed invention. No new matter should be entered.

### **Claims Objections**

3. Claims 1-13 are objected. Claim 1 (line 9), the recitation "lest" is a misspell.

***Allowable Subject Matter***

4. Claims 1-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 15-17 are allowed.

5. The following is an examiner's statement of reasons for allowance:

As of the date of this office action, the examiner has not located or identified any reference that can be used singularly or in combination with another reference including the closest prior art of Burnier et al. (US 4,958,006) to render the present invention anticipated or obvious to one of ordinary skill in the art.

*The invention of claims 1-13 relates to a **process** comprising:*

**(1) mixing Stream 1 with Stream 2 to produce Stream 3; wherein said mixing occurs in Mixing Zone One; wherein said Mixing Zone One comprises a slurry polymerization reactor selected from the group consisting of a loop reactor and a stirred tank; wherein Stream 1 comprises at least one catalyst deactivating agent; wherein Stream 2 comprises a reaction mixture; wherein said reaction mixture comprises at least one polyolefin, at least one catalyst at least one diluent, and at least one monomer; wherein Stream 3 comprises at least one polyolefin, at least one deactivated catalyst, at least one diluent, and at least one monomer;**

Art Unit: 1713

- (2) transporting at least a portion of Stream 3 from said Mixing Zone One through Stream Zone 1 and to Separating Zone One; wherein said Separating Zone One comprises at least one of flash chamber;**
- (3) separating Stream 3 in said Separating Zone One into Stream 4 and Stream 5; wherein said Stream 4 comprises a polyolefin lean stream wherein the majority of said Stream 4 comprises at least one diluent; wherein said Stream 5 comprises a polyolefin rich stream wherein the majority of said Stream 5 comprises at least one polyolefin;**
- (4) transporting Stream 5 from said Separating Zone One through a Stream Zone 3 to an Agglomerating Zone One;**
- (5) agglomerating Stream 5 in said Agglomerating Zone One to produce a Stream 6, wherein Stream 6 comprises at least one agglomerated polyolefin;**
- (6) transporting Stream 6 from said Agglomerating Zone One through Stream Zone 4 to a Product Recovery Zone.**

The invention of claims 15-17 relates to a **process** comprising: **introducing a catalyst deactivating agent** into an olefin polymerization zone; wherein said **olefin polymerization zone** comprises a slurry polymerization reactor selected from the group consisting of a **loop reactor** and a **stirred tank**; thereafter **passing polymerization zone effluent comprising deactivated catalyst, diluent and monomer** to a **separation zone**; wherein said **separation zone** comprises at least one **flash chamber** separating said polymerization zone effluent in said separation zone

Art Unit: 1713

***into a polyolefin lean stream comprising diluent and a polyolefin rich stream; and passing said polyolefin rich stream to an extrusion zone.***

The closest prior art Bernier et al. (col. 6, line 31-32) discloses a process of using **water as deactivator** for controlling the activities of the catalysts in a polymerization. The disclosure (Figure 1) details **a stream of reaction products** from the reactor 10 (Figure 1) and **a stream of deactivator 68** (Figure 1) enter and **combine in a mixing zone** of an extruder. Further, the stream of **deactivated resins and residual monomers is separated** in the extruder with vents to allow the residual gases and monomers to escape 52 and 54 (Figure 1). The separated polymer is then **transferred to a product recovery zone 44**. However, Bernier et al. are silent on a process comprising a loop reactor or a stirred tank reactor, and an agglomerating zone. Therefore, it would not be apparent to one of ordinary skill in art to use the process teachings of Bernier et al. to obtain the invention of claims 1-13, 15-17.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William K Cheung whose telephone number is (571)

Art Unit: 1713

272-1097. The examiner can normally be reached on Monday-Friday 9:00AM to 2:00PM; 4:00PM to 8:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David WU can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



William K. Cheung

Primary Examiner

March 31, 2005

WILLIAM K. CHEUNG  
PRIMARY EXAMINER

WILLIAM K. CHEUNG  
PRIMARY EXAMINER